

certain to infect starchy food under suitable moisture conditions, the suspicion is suggested that it may be related to certain destructive diseases of stock, such as pellagra ("corn-stalk disease"). Experiments are being conducted to discover the nature of the toxin and its possible relation to such diseases.—J. M. C.

**A new form of *Juglans*.**—BABCOCK<sup>30</sup> has investigated a new form of *Juglans californica* and described it as var. *quercina*, on account of the resemblance of its leaves to those of an oak. The new form has appeared on seven separate occasions among seedlings of at least three different trees of *J. californica*. Three working hypotheses were tested experimentally, the conclusions being that the form is not a hybrid of *J. californica* with *Quercus agrifolia* or some other oak; that it did not originate in certain teratological flowers that occur; and that in all probability it is a mutant.—J. M. C.

**Vascular anatomy of *Platycerium*.**—Miss ALLISON<sup>31</sup> has investigated the vascular anatomy of the rootstock of three species of *Platycerium*, uncovering a very unexpected complexity. The vascular cylinder is a complicated polystele, and in the largest form studied (*P. aethiopicum*) there are medullary strands also. She concludes that in the genus there is a progression from a comparatively simple type to a more complicated one. This anatomical structure certainly suggests a comparison with the Marattiaceae and the *Pteris*-like forms.—J. M. C.

**Mosses of New Zealand.**—DIXON<sup>32</sup> has begun a publication of a series of studies of the mosses of New Zealand, especially with reference to the herbarium of ROBERT BROWN at Christchurch. The first part contains a revision of the species of *Dicranoloma*, 16 species being recognized, 5 of which are described as new. These species have heretofore been included under *Dicranum*, and DIXON follows RENAULD'S treatment of this group as a separate genus.—J. M. C.

***Medullosa pusilla*.**—In his *Studies in fossil botany* (1909), SCOTT referred to a very small *Medullosa* closely resembling the well known *M. anglica* except in size. He named it provisionally *M. pusilla*, and now has given a further account, with illustrations.<sup>33</sup> Further study shows that it differs in no important respect from *M. anglica*, and that its chief interest probably lies in the fact that it is the smallest *Medullosa* on record.—J. M. C.

<sup>30</sup> BABCOCK, ERNEST B., Studies in *Juglans* I: Study of a new form of *Juglans californica* Watson. Univ. Calif. Publ. Agric. Sci. 2:1-46. pls. 1-12. 1913.

<sup>31</sup> ALLISON, HARRIET E., On the vascular anatomy of the rhizome of *Platycerium*. New. Phytol. 12:311-321. figs. 5. 1913.

<sup>32</sup> DIXON, H. N., Studies in the bryology of New Zealand, with special reference to the herbarium of Robert Brown. Part I. New Zealand Inst. Bull. no. 3. pp. 29. pls. 1-4. 1913.

<sup>33</sup> SCOTT, D. H., On *Medullosa pusilla*. Proc. Roy. Soc. London B 87:221-228. pl. 13. figs. 2. 1914.